Applicant respectfully disagrees. On the issue of rejections based on inherency, the Manual of Patent Examining Procedure states:

> The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).
>
> To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

M.P.E.P. § 2112.IV., page 2100-57, rev. 3, August 2005.

> "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

Ibid.

1. The rejected independent Claims 58 and 60 define "a proton conductive polymer is chemically bound to a surface of a pore" or "at least one graft polymer molecule is bound to a surface of a pore in the porous substrate at one end of the graft polymer," respectively. The "**chemically** bound" polymer provides the following features (a) and (b).

(a) Methanol crossover is reduced, or the filled polymer cannot be released from the pore of the substrate since one end of a molecule of the graft polymer is bound to a surface of the pore; and

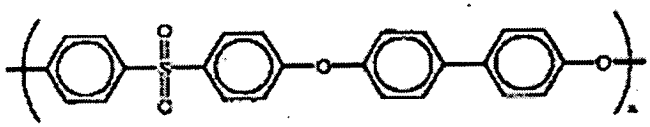
(b) High proton conductivity is exhibited because of the binding of the graft polymer having high proton conductivity to a surface of the pore.

2. Formato et al. (U.S. Patent No. 6,248,469) does not disclose nor suggest the "**chemically** bound" polymer nor the features (a) and (b) of the present invention.

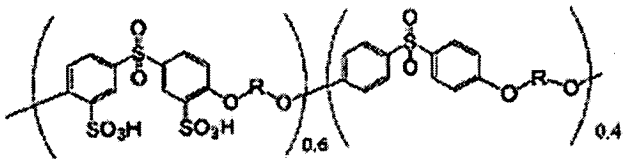
LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

3. Formato et al. (U.S. Patent No. 6,248,469) only discloses membranes prepared by a solution casting method as described on pages 14-15 of the amendment filed on December 23, 2005. For example, Example 9 (Col. 42, lines 49-60) of Formato et al. (U.S. Patent No. 6,248,469) discloses SPEM (Solid Polymer Electrolyte Membrane) prepared by a solution casting method in which PBO (polybenzoxazole, see Col. 10,, line 13) was used as a porous substrate, sulfonated Radel R® polymer (see Col. 23, Table 7) was used as an ion-conducting material, and NMP (N-Methyl-2-pyrrolidone, see Col. 8, lines 20-21) was used as a solvent for the sulfonated Radel R® polymer.

Polyphenylsulfone (Radel R ®)



4. The sulfonated Radel R® polymer used in Example 9 of Formato et al. has a chemical structure similar to the SPES polymer described in the declaration filed on December 23, 2005 (see following chemical structure):



SPES polymer

5. In accordance with the declaration, N-methylpyrrolidone and water are good solvents for the SPES polymer. N-methylpyrrolidone is also a good solvent for the sulfonated Radel R® polymer as described in Example 9 of Formato et al.

6. Taking the above remarks and declaration filed on December 23, 2005, into consideration, if the SPEM of Example 9 of Formato et al. is immersed in N-methylpyrrolidone (good solvent for the sulfonated Radel R® polymer), the sulfonated Radel R® polymer will be **leached out**.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

7. On the other hand, in accordance with Experiment B of the declaration, polymers according to the present invention were not leached out, since one end of the polymers is **chemically** bound to the surface of pores of the membrane.

8. Comparing above item 7 with above item 6, the "interpenetrated" ion-conducting material described in Formato et al. is leached out, while the "**chemically** bound" proton conductive, graft polymer according to the present invention is not leached out. Therefore, Formato et al. does not inherently disclose the present invention and Formato et al. does not suggest the present invention.

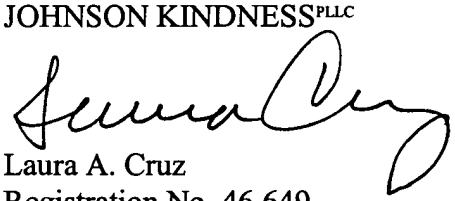
9. Accordingly, applicants believe that the present invention has novelty and unobviousness over Formato et al. (U.S. Patent No. 6,248,469).

CONCLUSIONS

In view of the foregoing remarks, applicants respectfully submit that Claims 14-38, 42-58, 60, 61, and 63-71 are allowable. If the Examiner has any further questions or comments, the Examiner may contact the applicants' attorney at the number provided below.

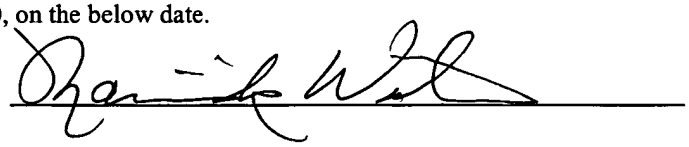
Respectfully submitted,

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS[PLLC]



Laura A. Cruz
Registration No. 46,649
Direct Dial No. 206.695.1725

I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below date.

Date: April 24, 2006 

LXC:mgp

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS[PLLC]
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100